



Department of Energy

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Mr Steve Gunderson
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Mr Tim Rehder
U S Environmental Protection Agency, Region VIII
999 18th Street, Suite 500
Denver, Colorado 80202-2466

Dear Mr Gunderson and Mr Rehder

Enclosed for your information is the Rocky Flats Cleanup Agreement (RFCA)
Implementation Quarterly Status Report for the first quarter of Fiscal Year 1999
Included in the report is an update to RFCA Attachment 12

If you have any questions concerning this report, please contact me at (303) 966-5918, or
Gail Hill at (303) 966-3424

Joseph A Legare
Assistant Manager
for Environmental Compliance

Enclosure

cc w/Enc
Administrative Record
Rocky Flats Citizens Advisory Board

cc w/o Enc
G Hill, EC, RFFO
S Bell, OCC, RFFO
D Shelton, K-H
L Brooks, K-H

ADMIN RECORD
SW-SW-A-03003

QUARTERLY STATUS REPORT

ROCKY FLATS CLEANUP AGREEMENT IMPLEMENTATION

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE

FIRST QUARTER FISCAL YEAR 1999

1 0 Introduction

Pursuant to paragraph 263 of the Rocky Flats Cleanup Agreement (RFCA or Agreement), this quarterly status report presents the progress toward implementation of activities covered under the Agreement. The RFCA is a legally binding agreement between the Department of Energy (DOE), the Environmental Protection Agency (EPA), and the Colorado Department of Public Health and Environment (CDPHE) to accomplish required cleanup of radionuclide and hazardous substance contamination at and from the Rocky Flats Environmental Technology Site (RFETS or Site).

This report describes activities that occurred from October 1, 1998 through December 31, 1998 (referred to as the first quarter of fiscal year [FY] 99). The sections of this report are organized into the following topics: (1) Introduction, (2) Key Site-wide Activities Supporting RFCA and Site Closure, (3) Issues Impacting RFCA Milestones or Target Activities, (4) a Summary Table of the status of the FY99 RFCA Milestones, Target Activities and Closure Projects, and (5) List of Approved Decision Documents.

2 0 Key Site-wide Activities Supporting RFCA and Site Closure

2 1 Actinide Migration Studies

During the first quarter of FY99, the following activities were conducted: (1) the FY99 work scope was finalized, (2) the results of the FY98 work were presented at a stakeholder meeting on October 22, 1998, (3) the status of the watershed erosion (WEPP) modeling and the FY99 work scope for the air modeling were presented at a stakeholder meeting on November 19, 1998, and (4) an information package (dated December 14, 1998) containing the FY98 results reports, the FY99 work scope documents, and the meeting summary from the October 21 through 22, 1998, meeting was distributed to the stakeholders and regulators. The preliminary results of the FY98 work on the redox experiments and the fractionation suggest that less than one percent of the plutonium is soluble (the rest is associated with the particulates), that the solubility does not appear to increase under reducing environmental conditions, and that most of the plutonium is likely associated with larger particles (greater than 2 microns). The preliminary results of WEPP modeling showed that one limitation of the model is that it does not handle sediment transport in perennial and ephemeral stream (e.g., Antelope Springs Gulch and Woman Creek) well, and thus separate sediment transport models are being evaluated. The next Actinide Migration Meeting will be on January 21, 1999, and will include a discussion with regulators on regulator-selected topics and a meeting with stakeholders on international work on radionuclide transport and uranium inductive-coupled plasma/mass spectrometry (ICP/MS) analyses.

2.2 Radionuclide Soil Action Levels Working Group

The RFCA Radionuclide Soil Action Levels (RSAL) Working Group (RRWG) reconvened in November 1998. The RRWG is tasked with evaluating and understanding new information and determining its impact to the RSALs. The RRWG evaluates the pluses and minuses of different approaches to developing RSALs. The RRWG had three meetings during the first quarter of FY99. These meetings are open to the public. The focus of the RRWG December meeting was a discussion on the potential application of the final Nuclear Regulatory Commission rule on "Radiological Criteria for License Termination." The next RRWG meeting is scheduled for January 19, 1999.

2.3 RFCA Attachment 5, Action Levels and Standards Framework for Surface Water, Ground Water and Soils (ALF)

The RFCA Parties continued updating the ALF tables throughout the first quarter of FY99. The proposed changes will go out for a 45-day public comment period that is expected to begin in the second quarter of FY99.

3.0 Issues Impacting RFCA Milestones or Target Activities

Completion of RFCA Milestone M2, ship 670 cubic meters of transuranic/transuranic mixed waste (TRU/TRM) to the Waste Isolation Pilot Plant (WIPP) by September 30, 1999, may be impacted. New Mexico is continuing to pursue a policy of not allowing disposal of any TRU waste at WIPP until the hazardous waste permit is issued. New Mexico is seeking to enforce this policy through judicial action against DOE. New Mexico is also joined as plaintiffs in this action by a number of environmental groups. Although DOE is working in a consultative fashion with New Mexico to change this policy, DOE has agreed not to ship non-mixed TRU waste until the court has had an opportunity to rule on this issue. At present, a ruling is not expected before February 1999. Should the shipment of non-mixed TRU waste to WIPP become feasible, waste from Los Alamos National Laboratory (LANL) will first be shipped to WIPP. As with the LANL waste, New Mexico will likely demand that any non-mixed TRU waste from RFETS be sampled and analyzed as assurance it is non-mixed, rather than agree to current process knowledge determinations. It is not anticipated that RFETS non-mixed TRU would be shipped to WIPP until after February 1999, and the projected shipping rate is uncertain at best. The hazardous waste permit is not expected to be issued until about September 1999.

On November 2, 1998, the RFCA Parties agreed to a modification to FY99 Target Activity T5. The modification excludes composites, in addition to holdup, from the removal of solid Cat I and II special nuclear material (SNM) from Building 776/777 by September 30, 1999.

No other issues were identified during the first quarter of FY99 that impact RFCA Milestones or Target Activities.

4.0 Summary Table

The following table provides a status summary of the FY99 RFCA Milestones, Target Activities, and Closure Projects through the first quarter of FY99.

**RFCA Milestone (R-M), Target Activities (R-T), and Closure Projects
Tracking Table FY99**

Driver	Commitment	Due Date	At Risk	Status/Comments
R-T	FY99-T1 Thermally stabilize 90% of the plutonium oxide generated during the year by 9/30/99	9/30/99	N	On Schedule
R-T	FY99-T2 Complete the offsite shipment of the pits by 9/30/99	9/30/99	N	On Schedule
R-T	FY99-T3 Drain 6 systems in Building 771 by 9/30/99	9/30/99	N	On Schedule
R-T	FY99-T5 Remove solid Categories I and II SNM (not holdup and composites) from Building 776/777 by 9/30/99	9/30/99	N	On Schedule
R-M	FY99-M1 Either (a) ship cumulative amount of 78% of 10/01/96 pond/salt inventory off site and evacuate all waste from Tent 9 by 9/30/99 or (b) the additional on site storage for pond/salt is operational by 9/30/99	9/30/99	N	On schedule 78% of 10/01/96 pond/salt inventory has been shipped offsite
R-M	FY99-M2 Ship 670m3 of TRU/TRM to the WIPP by 9/30/99 assuming a January 1999 opening	9/30/99	Y	Indications are that shipments will likely not start until the RCRA permit is issued from NMED to WIPP (9/99) The shipping rate from the Site to WIPP is also uncertain
R-M	FY99-M3 Ship 1,750 cubic meters of low-level waste by 9/30/99	9/30/99	N	On Schedule As of 12/18/98, 9 '2 21 cubic meters have been shipped off site
R-M	FY99-M4 Complete installation and operate remedial action described in decision document for Solar Pond plume (N Walnut Creek) by 9/30/99	9/30/99	N	On Schedule During the first quarter of FY99 the alternatives analysis was completed A draft decision document is being prepared and will be submitted to the regulators for review during the second quarter of FY99
R-M	FY99-M5 Complete installation and operate remedial action described in decision document for East Trenches/903Pad/ Ryan's Pit Mound plume (S Walnut Creek) by 9/30/99	9/30/99	N	On Schedule During the first quarter of FY99, the alternatives analysis for the East Trenches Plume was completed, a draft decision document was prepared and reviewed by the regulators, and the draft decision document was made available for a 30-day public comment period starting on December 29 1998 and scheduled to end on January 28 1999
R-M	FY99-M7 Develop a comprehensive characterization/remediation strategy for the Industrial Area soils and groundwater by 9/30/99	9/30/99	N	On Schedule The Kaiser-Hill Team has prepared an annotated outline of the planned strategy A historical data search is underway
R-M	FY99-M8 Complete off-site shipment by 9/30/99 for treatment and/or disposal of all T-1 waste streams not returned to T 1 and for which treatment or disposal locations are available and controlling documents are in place by 4/30/99	9/30/99	N	On Schedule A market survey of available treatment/disposal options was completed during the first quarter of FY99 To date no immediate

Driver	Commitment	Due Date	At Risk	Status/Comments
				treatment/disposal options have been identified. Efforts are continuing during the second quarter of FY99 to identify the best treatment/disposal options.
R-M	FY99-M9 Complete information management system for integrated Site-wide monitoring and environmental database by 9/30/99	9/30/99	N	On Schedule. A draft document outlining completion criteria was completed and reviewed with agency technical representatives. Final approval expected in second quarter of FY99.
R-M	FY99-M10 Either (a) construct and operate new facility for storage of TRU/TRM by 9/30/99 or (b) by 9/30/99 demonstrate adequate storage available for TRU/TRM through 9/30/00	9/30/99	N	On Schedule
R-M	FY99 M11 Complete characterization of the 903 Pad as defined in the approved Sampling Analysis Plan by 9/30/99 (with the exception of the remaining radiologic boreholes which will be completed by 12/31/99)	9/30/99	N	On Schedule. As of 12/31/98 gamma spectroscopy measurements have been taken at 624 locations in the americium zone and the lip area. During the first quarter of FY99 6 boreholes were installed and sampled for volatile organic compound characterization. Analytical results from these samples are pending.
Closure Project	B771	N/A	N/A	Public comment period on the B771 Cluster Closure Project Decommissioning Operations Plan (DOP) closed on October 28, 1998. Comments were resolved during the first quarter of FY99. Approval of DOP is expected during the second quarter of FY99.
Closure Project	B776/777 Cluster Closure Project	N/A	N/A	The Reconnaissance Level Characterization Report was completed and submitted to the regulators in early December 1998. Draft DOP under development.
Closure Project	B779 Cluster Closure Project	N/A	N/A	DOP approved 2/6/98. CDPHE approved the B729 Demolition Plan on 11/13/98. Demolition of B729 is expected to be completed in FY99.
Closure Project	B886 Cluster Closure Project	N/A	N/A	Interim Measure/Interim Remedial Action approved 8/3/98. As of 12/31/98 Room 101 has been stripped out with the exception of the Annular Tank and Assembly Hood. Strip out of Room 103 will continue in FY99.
Closure Project	Operable Unit 1	N/A	N/A	Amendment to the approved Corrective Action Decision/Record Of Decision specifying long-term monitoring.

Driver	Commitment	Due Date	At Risk	Status/Comments
				with No Further Remedial Action is expected in FY99
Closure Project	Operable Unit 5	N/A	N/A	Awaiting final RCRA Facility Investigation/Remedial Investigation report approval
Closure Project	Operable Unit 7	N/A	N/A	Modifications to the passive seepage collection system were completed during the first quarter of FY99. Sampling is being performed in accordance with the approved, modified sampling and analysis plan.
Closure Project	IHSS 118.1	N/A	N/A	The sampling and analysis plan for IHSS 118.1 was completed and submitted to the agencies for review during the first quarter of FY99. Installation of monitoring wells will be completed in the second quarter of FY99.

5.0 List of Approved Decision Documents

The Decommissioning Program Plan dated October 8, 1998 was approved by CDPHE on November 4, 1998, and by EPA on November 12, 1998.

A minor modification to the DOP for the Building 779 Cluster was approved by CDPHE on November 13, 1998. The minor modification included the demolition plan for Building 729.